IN THE CLAIMS:

Following are the current claims. For the claims that have **NOT** been amended in this response, any differences in the claims below and the current state of the claims is unintentional and in the nature of a typographical error:

1. (Cancelled)

2. (Currently Amended) A method in accordance with claim ~~1~~ 5, wherein evaluating comprises:

determining loss of synchronization when a majority of the plurality of synchronization indicators indicate the loss of synchronization.

3. (Currently Amended) A method in accordance with claim ~~1~~ 5, further comprising:

producing each of the plurality of synchronization indicators by one of a plurality of synchronization detectors.

4. (Original) A method in accordance with claim 3, wherein producing comprises:

producing a guard band energy synchronization indicator based on the energy measured within a guard band.

5. (Currently Amended) ~~A method in accordance with claim 3, wherein producing comprises:~~ A method of detecting a loss of synchronization between a transmitter and a receiver:

evaluating a plurality of synchronization indicators to detect a loss of synchronization between a transmitter and a receiver in a wireless communication system;

producing each of the plurality of synchronization indicators by one of a plurality

of synchronization detectors; and

producing a phase magnitude differential synchronization indicator based on a difference in a first pilot signal phase of a pilot signal received in a first time slot and a second pilot signal phase of the pilot signal received in a second time slot.

6. (Currently Amended) A method in accordance with claim ~~3~~ 5, wherein the producing comprises:

producing a phase-frequency synchronization indicator based on a phase frequency relationship of a plurality of pilot signals having different frequencies.

7. (Currently Amended) ~~A method in accordance with claim 3, wherein producing comprises:~~ A method of detecting a loss of synchronization between a transmitter and a receiver:

evaluating a plurality of synchronization indicators to detect a loss of synchronization between a transmitter and a receiver in a wireless communication system;

producing each of the plurality of synchronization indicators by one of a plurality of synchronization detectors; and

producing a guard band energy synchronization indicator based on the energy measured within a guard band;

producing a phase magnitude differential synchronization indicator based on a difference in a first pilot signal phase of a pilot signal received in a first time slot and a second pilot signal phase of the pilot signal received in a second time slot; and

producing a phase-frequency synchronization indicator based on a phase-frequency relationship of a plurality of pilot signals having different frequencies, wherein evaluating comprises determining loss of synchronization if at least two of the plurality of synchronization indicators indicate the loss of synchronization has occurred.

8. (Original) A method in accordance with claim 7 wherein producing the guard band energy synchronization indicator comprises:

measuring an energy level of a pilot signal within the frequency guard band, wherein the pilot signal is transmitted adjacent to the frequency guard band; and

detecting a loss of synchronization between the transmitter transmitting the pilot signal and the receiver in accordance with the energy level.

9. (Original) A method in accordance with claim 8, further comprising:

determining loss of synchronization if the energy within the guard band is above a threshold.

10. (Original) A method in accordance with claim 9, further comprising:

measuring another energy level of another pilot signal within another frequency guard band, the another pilot signal transmitted adjacent to the another frequency guard band, wherein detecting loss of synchronization comprises comparing a threshold to a ratio of the energy level with respect to the another energy level.

11. (Original) A method in accordance with claim 10, wherein comparing the ratio comprises:

detecting loss of synchronization if the ratio is outside a range.

12. (Original) A method in accordance with claim 7, wherein the producing a phase-frequency synchronization indicator comprises:

detecting loss of synchronization based on a slope of a line defined by a relationship between the frequency and the phase of the plurality of pilot signals.

13. (Original) A method in accordance with claim 12, wherein detecting the loss of synchronization comprises detecting loss of synchronization based on a number of slope-exceeding occurrences within a time period.

14. (Original) A method in accordance with claim 13, wherein detecting further comprises counting the number of slope-exceeding occurrences by counting a number of observed values greater than the timing threshold of the slope of the line defined by the relationship between the frequency and the phase of the plurality of pilot signals.

15. (Cancelled)

16. (Currently Amended) A receiver in accordance with claim ~~15~~ 17, wherein the controller is further adapted to determine loss of synchronization if a majority of the plurality of synchronization indicators indicate loss of synchronization.

17. (Currently Amended) ~~A receiver in accordance with claim 15, wherein the plurality of synchronization detectors comprise:~~ A receiver adapted to detect a loss of synchronization between the receiver and a transmitter comprising:

a plurality of synchronization detectors adapted to detect a loss of synchronization between a transmitter and the receiver, each of the plurality of synchronization detectors producing a synchronization indicator to provide a plurality of synchronization indicators; and

a controller adapted to evaluate the plurality of synchronization indicators to establish the loss of synchronization between the transmitter and the receiver;

a guard band energy synchronization detector adapted to produce a guard band energy synchronization indicator based on energy measured within a guard band;

a phase magnitude differential synchronization detector adapted to produce a phase magnitude differential synchronization indicator based on the difference in a first pilot signal phase of a pilot signal received in a first time slot and a second pilot signal phase of the pilot signal received in a second time slot; and

a phase-frequency synchronization detector adapted to produce a phase-frequency synchronization indicator based on a phase frequency relationship of a plurality of pilot signals having different frequencies, wherein the evaluating comprises determining loss of synchronization if at least two of the plurality of synchronization indicators indicate the loss of synchronization has occurred.

18. (Original) A receiver in accordance with claim 17 wherein the guard band energy synchronization detector is further adapted to:

measure an energy level of a pilot signal within the frequency guard band, wherein the pilot signal is transmitted adjacent to the frequency guard band; and

detect the loss of synchronization between the transmitter transmitting the pilot signal and the receiver in accordance with the energy level.

19. (Original) A receiver in accordance with claim 18, wherein the guard band energy synchronization detector is further adapted to produce the guard band energy synchronization indicator indicating loss of synchronization if the energy within the guard band is above a threshold.

20. (Original) A receiver in accordance with claim 19, wherein the guard band energy synchronization detector is further adapted to measure another energy level of another pilot signal within another frequency guard band, the another pilot signal transmitted adjacent to the another frequency guard band, wherein the guard band synchronization indicator indicates the loss of synchronization based on a comparison between a threshold and a ratio of the energy level to the another energy level.

21. (Original) A receiver in accordance with claim 20, wherein the guard band synchronization indicator indicates the loss of synchronization if the ratio is outside a range.

22. (Original) A receiver in accordance with claim 17, wherein the phase-frequency synchronization detector is adapted to detect loss of synchronization based on a slope of a line defined by a relationship between the frequency and the phase of the plurality of pilot signals.

23. (Original) A receiver in accordance with claim 22, wherein the phase-frequency synchronization detector is further adapted to detect loss of synchronization based on a number of slope-exceeding occurrences within a time period.

24. (Original) A method in accordance with claim 23, wherein the phase-frequency synchronization detector is further adapted to count the number of slope-exceeding occurrences by counting a number of observed values greater than the timing threshold of the slope of the line defined by the relationship between the frequency and the phase of the plurality of pilot signals.